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EXAMINER

NGUYEN, DUSTIN

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/789,278	Applicant(s) REUS ET AL.	
	Examiner DUSTIN NGUYEN	Art Unit 2454	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-40 are presented for examination.

Claim Objections

2. Claim 38 is objected to because of the following informalities: "security patches to installed software" should be corrected as "security patches to install software".
Appropriate correction is required.

Response to Arguments

3. Applicant's arguments filed 04/13/2009 have been fully considered but they are not persuasive.
4. As per remarks, Applicants argued that (1) Traversat and Ogier discuss a change in information responsive to a topology change, while independent claims discuss a change in topology responsive to received information, and thus, Traversat and Ogier fail to disclose, teach, or suggest the claimed limitations.
5. As to point (1), the claim remains rejected as indicated in previous Office Action by Traversat and Ogier. In response to Applicants statement that Traversat and Ogier

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discuss a change in information response to a topology change, while independent claim 1 discusses a change in topology responsive to received information, Examiner disagrees since Traversat discusses a change in topology responsive to received information in various paragraphs, i.e. peer monitoring and metering for detect failure in a peer system as soon as possible so that corrective actions can be taken such as shut down an erratic peer and transfer its responsibilities to another peer, paragraphs 0481-0484, i.e. peers may move around, and therefore the p2p network topology may be dynamic, and may change every time a peer goes away or moves, paragraph 0432. In addition, Ogier discusses dynamic topology changes may result in nodes leaving/joining subnet [i.e. change in topology in response to received information] [col 4, lines 31-36; col 5, lines 22-43; and col 27, lines 57-col 28, lines 16].

Claim Rejections – 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3-6, 10-12, 17, 18, 20-23, 27-29 and 34-37 rejected under 35 U.S.C. 103(a) as being unpatentable over Traversat et al. [US Patent Application No 2002/0184310], in view of Ogier [US Patent No 7,031,288].

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8. As per claim 1, Traversat discloses the invention as claimed including a method comprising:

transmitting a query by a computing device in a domain [i.e. initiating a discovery query to discover peer groups] [paragraphs 0029, 0119 and 0123];

receiving, by the computing device, a response to the query from one or more neighbor-casting (NC) groups in the domain each including one or more said computing devices [i.e. one or more peer receiving the first peer's discovery query may reply to the query] [paragraphs 0126, 0128, 0332];

applying, by the computing device, a predetermined criteria to select one said NC group [i.e. criteria] [paragraphs 0029, 0119-0121, and 0127]; and

joining the computing device to the selected NC group [paragraphs 0122 and 0128].

Traversat does not specifically disclose

when a length of time between a subsequent query from the computing device and other computing devices in the selected NC group exceeds a predetermined threshold;

removing the computing device from the initial NC group; and

joining the computing device to a different NC group.

Ogier discloses

when a length of time between a subsequent query from the computing device and other computing devices in the selected NC group exceeds a predetermined threshold [i.e. if a neighbor discovery message is not received from the neighbor node within a predetermined time period, that neighbor node is determined to be in a lost state [Figure 12; col 1, lines 64-col 2, lines 3; and col 25, lines 58-col 26, lines 24], and each node running protocol to detect the

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loss of established links to existing neighbor nodes [Figure 3; col 9, lines 39-52; col 12, lines 34-39; and col 25, lines 45-57]];

removing the computing device from the initial NC group and joining the computing device to a different NC group [i.e. dynamic topology changes may result in nodes leaving their home subnet to join a foreign subnet [col 4, lines 33-36; col 5, lines 22-62], and update link information table [col 6, lines 14-27; col 12, lines 55-64; and col 13, lines 33-45]].

It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Traversat and Ogier because the teaching of Ogier would enable to provide a protocol to be responsive to network topology changes [Ogier, col 1, lines 36-49].

9. As per claim 3, Traversat discloses wherein each said NC group has an identifier that is unique to other said NC groups in the domain [i.e. unique ID] [paragraphs 0103 and 0147].

10. As per claim 4, Traversat discloses wherein each said computing device is selected from among a video game console, a set top box, an automatic teller machine, a Personal Digital Assistance (PDA), a Personal Computer (PC), a cellular telephone, a printer, a facsimile machine, a copier, a multifunction peripheral device, and a server [paragraphs 0022, 0079 and 0099].

11. As per claim 5, Traversat discloses wherein each said response to the query is transmitted by one said computing device in a respective said NC group [paragraphs 0119 and 0126].

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12. As per claim 6, Traversat discloses wherein the query is transmitted over a TCP network with a broadcast or multicast [paragraphs 0155 and 0157].

13. As per claim 10, Traversat discloses wherein one or more of the transmitting, the receiving, the applying, and the joining are executed by a component of an operating system of the computing device that is joined to the selected NC group [paragraphs 0096 and 0486].

14. As per claim 11, Traversat discloses wherein each of the transmitting, the receiving, the applying, and the joining are executed by the operating system of the computing device joined to the selected NC group [paragraphs 0016 and 0080].

15. As per claim 12, Traversat discloses wherein one or more of the transmitting, the receiving, the applying, and the joining are executed by an application that is running on the computing device joined to the selected NC group [paragraphs 0072 and 0097].

16. As per claim 17, it is rejected for similar reasons as stated above in claim 1.

17. As per claim 18, it is rejected for similar reasons as stated above in claim 1. Furthermore, Traversat discloses removing the initial computing device from the initial NC group [i.e. remove or invoke membership] [paragraphs 0380 and 0438]. Traversat does not specifically disclose if a latency in response times between the initial computing device and other computing devices within the initial NC group is unacceptable; and computing devices within

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the selected NC group have a latency in response time with the initial computing device that is acceptable. Ogier discloses if a latency in response times between the initial computing device and other computing devices within the initial NC group is unacceptable; and computing devices within the selected NC group have a latency in response time with the initial computing device that is acceptable [i.e. movement by the client in the subnet may cause the client to move in and out of communication range of the home subnet and into foreign subnet [Figure 1; and col 38, lines 43-63]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Traversat and Ogier because the teaching of Ogier would enable to provide a protocol to be responsive to network topology changes [Ogier, col 1, lines 36-49].

18. As per claims 20-23, they are rejected for similar reasons as stated above in claims 3-6.

19. As per claims 27-29, they are rejected for similar reasons as stated above in claims 10-12.

20. As per claim 34, it is rejected for similar reasons as stated above in claim 18.

21. As per claims 35 and 36, they are rejected for similar reasons as stated above in claims 1, and 18.

22. As per claim 37, it is rejected for similar reasons as stated above in claim 35.

23. Claims 2, 7-9, 13-16, 19, 24-26, 30-33, 38-40 rejected under 35 U.S.C. 103(a) as being unpatentable over Traversat et al. [US Patent Application No 2002/0184310], in view of Ogier [US Patent No 7,031,288], and further in view of O'Hara, Jr. et al. [US Patent No 7,302,256].

24. As per claim 2, it is rejected for similar reasons as stated above in claim 1. Furthermore, Traversat and Ogier do not specifically disclose wherein the predetermined criteria is selected from the group consisting of: the number of said computing devices in the selected NC group. O'Hara discloses wherein the predetermined criteria is selected from the group consisting of: the number of said computing devices in the selected NC group [i.e. selection according to variety of criteria including the number of access element it currently supervises] [Figure 3A; and col 10, lines 62-col 11, lines 47; and col 12, lines 14-38]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Traversat, Ogier and O'Hara because the teaching of O'Hara on selection criteria would enable facilitate deployment and configuration of access elements in a hierarchical wireless network system in a manner that seamlessly integrates with existing network infrastructures [O'Hara, col 3, lines 47-55].

25. As per claim 7, O'Hara discloses wherein the predetermined criteria to select one said NC group ignores each said response from any said NC group for which the length of time

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between the query and the response exceeds a predetermined maximum [i.e. after threshold period of time] [col 14, lines 36-45].

26. As per claim 8, O'Hara discloses wherein: each said response includes the number of computing devices in the responding said NC group [i.e. load parameter which associates with number of access elements] [col 10, lines 37-47]; and the predetermined criteria to select one said NC group ignores any said NC group for which the response includes the number of computing devices in the responding said NC group that exceeds a predetermined maximum [i.e. select least load] [col 11, lines 1-5].

27. As per claim 9, Traversat discloses wherein each said response includes an identifier that is unique to the responding said NC group in the domain [paragraphs 0103. 0104 and 0147].

28. As per claim 13, Traversat discloses wherein the applying further comprises determining at least one of: a closest said NC group for which the corresponding response was first to be received. Traversat and Ogier do not specifically disclose a smallest said NC group that has the least number of the computing devices from among those said NC groups for which the response was received. O'Hara discloses a smallest said NC group that has the least number of the computing devices from among those said NC groups for which the response was received [i.e. smallest number of access elements under management] [col 11, lines 43-47]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Traversat, Ogier and O'Hara because the teaching of O'Hara on selection criteria

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would enable facilitate deployment and configuration of access elements in a hierarchical wireless network system in a manner that seamlessly integrates with existing network infrastructures [O'Hara, col 3, lines 47-55].

29. As per claim 14, O'Hara discloses wherein the applying further comprises selecting the one said NC group to be the smallest said NC group when the closest said NC group is more than one said NC group [col 8, lines 4-12; col 10, lines 47-61; and col 11, lines 43-47].

30. As per claim 15, it is rejected for similar reasons as stated above in claim 1. Furthermore, O'Hara discloses wherein the applying further comprises ordering said NC groups for which a corresponding said response was received according to: a number that quantifies the computing devices in the corresponding NC group as is contained in the corresponding response [i.e. selection priority] [Figure 3A; and col 10, lines 62-col 11, lines 47].

31. As per claim 16, it is rejected for similar reasons as stated above in claims 2, and 13-15.

32. As per claims 19, 24-26 and 30-33, they are rejected for similar reasons as stated above in claims 2, 7-9 and 13-16.

33. As per claim 38, it is rejected for similar reasons as stated above in claims 1, 2, 7. Furthermore, Traversat discloses applying, by the computing device, a predetermined criteria to select one said NC group other than the initial NC group [i.e. join or leave peer group] [

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paragraphs 0380 and 0466], and updating software on computing devices in the selected NC group, wherein the updating comprises deploying software, uninstalling software and providing security patches to installed software, and wherein the software updating includes setting the predetermined criteria to locate computing devices within the selected NC group according to backup needs of computing devices within the NC group [paragraphs 0086, 0188, and 0480].

34. As per claim 39, it is rejected for similar reasons as stated above in claim 16.

35. As per claim 40, it is rejected for similar reasons as stated above in claim 38.

36. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dustin Nguyen whose telephone number is (571) 272-3971. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached at (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Dustin Nguyen/
Primary Examiner, Art Unit 2454